

232317



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

APR 9 2000

SUBJECT: Approval of Request for Change of Scope for Removal Action
50th and Hayes Site
Washington, D.C.

FROM: Abraham Ferdas, Director *Abraham Ferdas*
Hazardous Site Cleanup Division (3HS00)

TO: Timothy R. Fields, Assistant Administrator
Office of Solid Waste and Emergency Response (5101)

THRU: Stephen D. Luftig, Director
Office of Emergency and Remedial Response (5201G)

ATTN: Thomas R. Sheckells, Director
Region 3/8 Accelerated Response Center (5401G)

ISSUE

Region III has approved the attached Request for Change of Scope for Removal Action at the 50th and Hayes Site in Washington, D.C. The properties at 50th and Hayes were contaminated, it is believed, through the operation of an illegal "chop shop." Region III initially took an action at the Site at the request of D.C. Environmental Crimes Unit (ECU) and Fire/EMS Special Hazards Unit investigators, who stated that neighborhood children had apparently learned that the contaminated soils on the Site could be set on fire and that, once ignited, the soils exhibited unusual ignitability consistent with chemical contamination. Once ignited, the soils burned for some time; it was reported that the D.C. fire department had difficulty in suppressing the fires once ignited, and that the flames continued for several days. Earlier EPA investigations at the Site had found extensive oil contamination (though no nearby waterways) and several drums containing low levels of organic compounds. In addition, numerous other drums containing solvents had been removed by D.C. responders following the flight of the owner/operator of the property.

Thus, based on the fact that previous activities at the Site, which included illegal disposal of numerous drums containing solvents, could quite possibly have contaminated the soils with a mixture of both oil and flammable organic compounds, and because local children had discovered that the soils on-Site were easily ignited, the On-Scene Coordinator (OSC) determined that the Site posed an imminent and substantial threat to human health and welfare. At that time, the OSC's activation was based on the ignitability of the soils (ignitability being one of the characteristics of hazardous wastes under the Resource Conservation and Recovery Act). On September 8, 1999, the OSC determined that a Superfund response action was necessary and

AR200004

appropriate under the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) and initiated a Superfund response using her \$200,000 emergency funding authority pursuant to EPA Delegation of Authority 14-1-A.

Since that time, additional sampling has shown that lead, a hazardous substance under CERCLA, is also a significant hazard at the Site, with soil-lead contamination as high as 2,800 parts per million (ppm) exposed to foot traffic including children attending the elementary school located across the street from the Site. The Agency for Toxic Substances and Disease Registry (ATSDR) determined, and EPA agreed, that these soils pose a threat to human health and should be removed. Thus, the OSC has recommended excavation and off-site disposal of the contaminated soils to which access is currently unrestricted.

Therefore, because conditions at the Site continue to meet the Removal criteria set forth in section 300.415 of the NCP, and pursuant to Delegations of Authority 14-1-A giving the Director of the Hazardous Site Cleanup Division (HSCD) authority to approve CERCLA Removal Actions costing up to \$2,000,000, Region III has approved this Request for Change of Scope for Removal Action. This approval does not change previously approved funding levels of \$200,000.

Attachment: Request for Change of Scope for Removal Action

AR200005



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III

1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

APR 3 2000

SUBJECT: Request for Change of Scope for Removal Action
50th and Hayes Site
Washington, D.C.

FROM: *for* Colby E. Stanton, On-Scene Coordinator
Removal Response Section (3HS31)

TO: Abraham Ferdas, Director
Hazardous Site Cleanup Division (3HS00)

I. ISSUE

An assessment performed in accordance with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 C.F.R. Part 300, by the On-Scene Coordinator (OSC) has identified a threat to human health due to the release of hazardous substances at this location. The OSC believes that the 50th and Hayes Site became contaminated through the operation of an illegal "chop shop." This Site is contaminated with lead, a hazardous substance, which is currently being released and/or which threatens to be released. The uncontrolled release of a hazardous substance poses a direct contact threat to the public, including students attending the elementary school directly across the street from the Site.

On September 8, 1999, a Removal Action was initiated by the OSC under her emergency funding authority (EPA Delegation 14-1-A) to limit access to certain soils believed to be ignitable due to chemical contamination. The threat giving rise to this activation was mitigated through erection of a fence to limit access to the contaminated soils.

Since the initial activation, EPA has performed additional sampling at the Site both within and outside the fence to determine the nature and extent of the contamination and resulting threats to public health and the environment. Soil-lead contamination has been identified inside the fence as high as 5,135 parts per million (ppm) and outside the fence as high as 2,800 ppm. The Agency for Toxic Substances and Disease Registry (ATSDR) has determined, and the OSC agrees, that those soils that are exposed to foot traffic by students attending the elementary school across the street pose a threat to human health and should be removed. Consequently, this action memorandum documents a Change of Scope from the original action authorized by the OSC.

The OSC proposes to excavate and dispose of lead-contaminated soils located outside the fence at an off-site disposal facility. Lead-contaminated soils inside the fence currently pose no

AR200006

threat and will not be addressed in this action.¹ No additional funds are needed to carry out the response proposed in this Memorandum. The total budget ceiling will remain at \$200,000.

II. BACKGROUND

A. Site Description

The 50th and Hayes Site consists of several parcels at and near the intersection of 50th and Hayes Streets in Washington, D.C. where lead-contaminated soils are found (see Figure 1 and note that "north" is toward the bottom of the page). Specifically, lead contamination is located on a parcel east of 50th Street where the former Quality Automotive body shop facility was located, a fenced parcel west of 50th Street just north of Hayes, and a strip of land between the fenced parcel and Hayes Street. According to reports from Washington D.C. Environmental Crimes Unit (ECU), EPA Region III investigators, and personnel from the Bureau of Alcohol, Tobacco, and Firearms (ATF) with whom the OSC has spoken, the Site allegedly became used by the operator of an illegal "chop shop." The contaminated properties are located in a mixed residential/light commercial area, across the street from an elementary school, next to a church, and down the street from a nursing home. Residences are located within the same block as the Site. The area's residents are predominantly black and lower-income.

B. Site History

The properties at 50th and Hayes were initially reported to the EPA Region III Regional Response Center on September 10, 1998. The Site was reported to contain waste oil/petroleum, tires, drums, and other flammable materials as the result of an illegal "chop shop" that had been operating out of the property. Drums of cleaning solvents were reported as having been dumped on-site. Due to difficulties in obtaining access to the Site, EPA OSCs were unable to enter the Site to perform a site assessment until February of 1999. The drums had, for the most part, been removed prior to the OSCs' initial site assessment visit. EPA OSCs Boyd and Stanton performed an assessment in February 1999 and sampled several drums that remained on-site. Analysis of the drum contents revealed low concentrations of various inorganic and organic compounds. Soils on the Site were observed to be deeply impregnated with what were assumed to be petroleum products. Because there was no visible pathway to a navigable waterway, the OSCs concluded that the Site did not present a release of oil triggering response authority under the Oil Pollution Act of 1990. The OSCs also concluded at that time that the Site did not pose a threat of a release of hazardous substances warranting further Superfund response; this conclusion was drawn because only low levels of contamination were found in the drums and the

¹ Testing of the soils within the fence has shown that such soils do not exhibit the characteristic of "ignitability" within the meaning of 40 C.F.R. § 261.21. A prospective purchaser has approached EPA and requested permission to remove the lead-contaminated soils within the fence. If an agreement cannot be reached between EPA and the purchaser for this work, the OSC will seek additional approval and a funding increase at a later date to take an action to address the lead-contaminated soils inside the fence.

OSCs believed that it was likely that much of the soil contamination was due to oil. No soil samples were drawn at that time to confirm this assumption.

In September 1999, following the OSCs' initial visit to the Site, EPA was asked by the Director of Columbia (D.C.) ECU and Fire/EMS Special Hazards Unit investigators for assistance because the soils at the Site possessed unusual ignitability that was believed to be related to chemical contamination. D.C. ECU and Fire/EMS Special Hazards Unit investigators stated that neighborhood children had apparently learned that the contaminated soils on the Site could be set on fire and that, once ignited, the soils exhibited unusual characteristics consistent with chemical

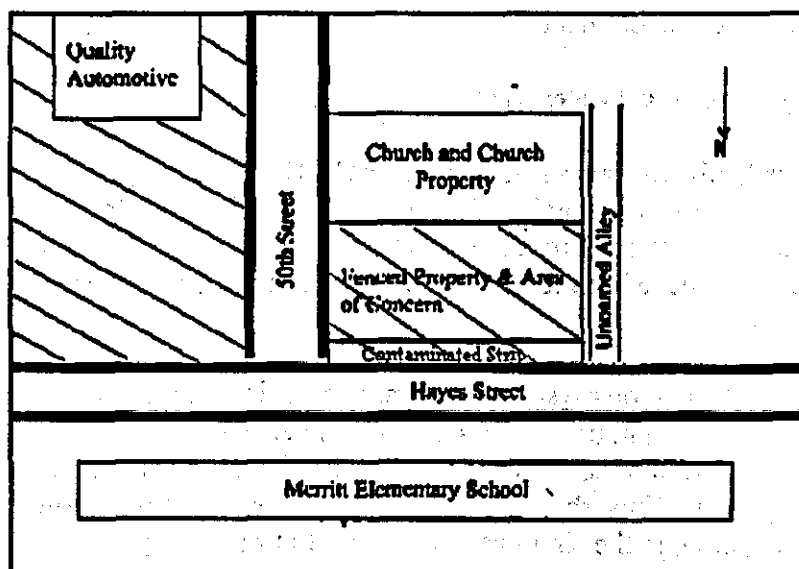


FIGURE 1 (Drawing Not to Scale)
50th & Hayes Site, Washington, D.C.
Contaminated Areas Depicted With Hatch Marks

contamination. Once ignited, the flames were difficult to extinguish, with flames continuing for several days. Thus, based on the fact that previous activities at the Site, which included illegal disposal of numerous drums containing solvents, could quite possibly have contaminated the soils with a mixture of both oil and flammable organic compounds, and because local children had discovered that the soils on-Site were easily ignited, the OSC determined that the Site posed an imminent and substantial threat to human health and welfare. At that time, the OSC's activation was based on the fact

that any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act is defined as a hazardous substance under CERCLA and that ignitability is such a characteristic. Thus, on September 8, 1999, the OSC determined that a Superfund response action pursuant to the NCP was appropriate and necessary and initiated a Superfund response using her \$200,000 emergency funding authority pursuant to EPA Delegation of Authority 14-1-A. On September 20, 1999, a fence was completed, limiting access to the soils believed to be ignitable.

Between September and December 1999, additional soil samples were collected and analyzed to determine whether hazardous substances were present at the Site. Several areas with elevated lead levels were found within the fenced areas, as high as 5,135 ppm lead. Samples were also taken from outside the fenced areas, where access was unrestricted. Analysis of these samples revealed elevated levels of lead and polycyclic aromatic hydrocarbons (PAHs) above both EPA Region III Risk-Based Concentrations (RBCs) and Emergency Removal Guidelines (ERGs). ATSDR determined that only the soil-lead contamination outside the fence presented a

public health hazard and needed to be addressed by a removal action. The area identified as a threat is limited in extent, representing approximately 10 to 15 tons of soil.

In October of 1999, following the initial determination that high lead levels existed at the Site, the OSC found that there was some question as to whether the fence erected by EPA, containing the land visibly contaminated by "chop shop" operations, included only the property comprising the private lots or also additional District property in front of the Site. D.C. records in this area were found to be lacking, and a surveyor was hired to clarify the property lines. It was then determined that the facility's operations had likely extended beyond the actual private property onto the easement retained by the City, and that the soil-lead contamination outside the fence is on ground owned by the District government.

C. Quantities and Types of Substances Present

Sampling has shown that lead, a hazardous substance under CERCLA, is the primary hazard at the Site, with soil-lead contamination as high as 2,800 ppm exposed to foot traffic by children attending the elementary school located across the street from the Site. Additional soils contaminated with up to 5,135 ppm lead have been found inside the fenced area, where access has been limited.

Exposure to lead can damage the nervous system, kidneys, and the immune systems. However, because lead is a common problem in urban areas, and human exposure may vary depending on the circumstances and location of contamination, EPA Region III does not have an ERG level set for soil-lead contamination. Thus, the OSC consulted with ATSDR to determine whether these levels of lead contamination, in the circumstances present at the Site, posed a threat to human health. ATSDR determined that the soils outside the fence pose a threat to human health and should be removed and replaced with at least six inches of clean cover and vegetation.

In addition to soil-lead contamination, PAHs (benzo(a)pyrene as high as 45 ppm and dibenz(a,h)anthracene as high as 13.5 ppm were found outside the fenced area. ATSDR was also consulted regarding this contamination, but determined that these substances do not pose a threat at this Site. PAHs primarily pose an inhalation hazard, which is not a factor at this Site.

D. National Priorities List Status

The 50th and Hayes Site is not on the National Priorities List (NPL), nor is it currently proposed for the List.

E. State and Local Authorities' Roles

D.C. has been an active participant in this response. D.C. responders initially removed numerous drums left at the Site by the operators. D.C. has requested EPA assistance in dealing with the soil contamination at the Site.

III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

Section 300.415 of the NCP outlines factors that EPA must consider in determining the appropriateness of a Removal Action. Paragraphs (b)(2)(i), (iv), and (vii) of Section 300.415 directly apply as follows to the conditions as they exist at the 50th and Hayes Site:

300.415 (b)(2)(i) "Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants"

Lead is a CERCLA hazardous substance that can damage the nervous system, kidneys, and the immune system. According to ATSDR, lead-contaminated soil and dust have been identified as important sources of exposure for children, especially in an urban setting. Children's developing body systems are more vulnerable to toxic exposures, especially during critical growth stages in which permanent damage may occur. Lead levels as high as 2,800 ppm have been found outside the fence in an area frequented by children and their parents on the way to the elementary school across the street. In addition, the Site is in an area next to a church and down the block from several residences.

300.415 (b)(2)(iv) "High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate"

Soils were sampled at a depth of 0 to 6 inches, with elevated lead levels as high as 2,800 ppm identified outside the fenced area. According to ATSDR, studies have indicated that, although the ingestion of lead-containing paint may lead to elevated blood lead levels in young children, the major source of moderately elevated blood lead levels in inner city children is mostly likely to be contaminated household dust. Because children often play on the floor and place their hands in their mouths, they are at higher risk of ingesting contaminated soil or dust. For this reason, ATSDR has suggested in such situations that restricted access to lead-contaminated soil will reduce not only incidental ingestion by children but also exposure to lead-contaminated household dust from soil tracked into the houses by individuals with access to the contaminated soils.

300.415 (b)(2)(vii) "The availability of other appropriate federal or state response mechanisms to respond to the release"

The District of Columbia has requested EPA assistance in addressing the Site.

IV. ENDANGERMENT DETERMINATION

The OSC has determined that actual or threatened releases of hazardous substances from this Site may present an imminent and substantial endangerment to public health or welfare, or the environment.

AR200010

V. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

The following actions are proposed to eliminate the threat of exposure to lead-contaminated soils outside the fenced area of the Site:

- Excavate soils contaminated in excess of 400 ppm lead which are located on the former Quality Automotive parcel east of 50th Street and between the fence and Hayes Street on the parcels west of 50th Street (the "contaminated strip" depicted in Figure 1).²
- Cover the excavated area with clean soils and vegetate to prevent potential erosion and re-exposure of soils;
- Temporarily stage contaminated soils on-Site awaiting off-Site disposal;
- Transport and dispose of contaminated soils off-Site to a facility that is acceptable under section 121(d)(3) of CERCLA and 40 C.F.R. § 300.440;
- Continue to coordinate with D.C. government representatives;
- Coordinate with local residents and the parents of elementary school students to disseminate information about the Site, the dangers of lead poisoning, and the D.C. Department of Health/Environmental Health Administration (DOH/EHA) Lead Poisoning Prevention Program

B. Estimated Costs

At the time that the OSC issued Special Bulletin A activating Superfund to address threats posed by the Site, the OSC expected that future activities might include excavation of contaminated soils. Thus, additional funds are not needed to carry out these proposed activities. Based on the nature of the threats identified, however, funds are proposed to be re-allocated as follows:

² EPA's "Revised Interim Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities" (OSWER Directive 9355.4-12 (July 14, 1994)) recognizes 400 ppm lead as the "screening level" for lead in residential soils. This is the soil lead level below which action is generally not required in residential settings. The OSC believes it appropriate to use this conservative level in this mixed residential/commercial setting.

	<u>"Special Bulletin A"</u> <u>Ceiling</u>	<u>This Action</u>	<u>Proposed</u> <u>Total Ceiling</u>
<u>Extramural Costs</u>			
ERRS	\$ 50,000	\$ 25,000	\$ 75,000
SATA	15,000	50,000	65,000
Total Extramural	\$ 65,000	\$ 75,000	\$ 140,000
<u>Intramural Costs</u>			
EPA Direct	\$ 5,000	\$ 10,000	\$ 15,000
EPA Indirect	15,000	30,000	45,000
Total Intramural	\$ 20,000	\$ 40,000	\$ 60,000
Unallocated	\$ 115,000	\$(115,000)	\$ 0
Estimated Total Project Ceiling	\$ 200,000	\$ 0	\$ 200,000

C. Contribution to Remedial Performance

The 50th and Hayes Site is not listed or proposed for listing on the CERCLA National Priorities List. The proposed Removal Action is consistent with accepted Removal practices and will abate the threats identified for the Site.

D. Compliance with ARARs

The proposed Removal Action set forth in this Change of Scope Memorandum will comply with all Applicable or Relevant and Appropriate environmental Regulations (ARARs) to the extent practicable considering the exigencies of the situation. Temporary staging units may be developed consistent with the Resource Conservation and Recovery Act (RCRA).

The OSC has discussed ARARs with representatives from the D.C. Department of Public Works, Fire/EMS, and Environmental Crimes Unit. The OSC has also spoken with representatives of the D.C. DOH/EHA regarding the proposed actions at the Site. On March 24, 2000, the OSC requested in writing that the District DOH/EHA identify proposed ARARs as soon as possible, but no later than April 7, 2000.

VII. OUTSTANDING POLICY ISSUES

VIII. ENFORCEMENT

IX. RECOMMENDATION

APPROVED: Chlor Fend DATE: 3/31/00

DISAPPROVED: _____ **DATE:** _____

AR200013